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FILE COVERS 1907 - 4 Dec 2002 VOL 137 ISS 23  
FILE LAST UPDATED: 3 Dec 2002 (20021203/ED)

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=> d stat que  
L5 148 SEA FILE=REGISTRY (ANTHOCYAN/BI OR ANTHOCYANASE/BI OR ANTHOCYAN ID/BI OR ANTHOCYANIDIN/BI OR ANTHOCYANIDINE/BI OR ANTHOCYANIDIN S/BI OR ANTHOCYANIDOL/BI OR ANTHOCYANIN/BI OR ANTHOCYANINLESS1/ BI OR ANTHOCYANINS/BI OR ANTHOCYANO/BI OR ANTHOCYANOSIDES/BI)  
L6 1 SEA FILE=REGISTRY CYANIDIN/CN  
L7 1 SEA FILE=REGISTRY PEONIDIN/CN  
L8 1 SEA FILE=REGISTRY PELARGONIDIN/CN  
L9 1112 SEA FILE=REGISTRY HYDROCHLORIC ACID?/CN  
L10 564 SEA FILE=REGISTRY CITRIC ACID?/CN  
L11 10774 SEA FILE=HCAPLUS L5 OR ANTHOCYAN?  
L12 2545 SEA FILE=HCAPLUS L6 OR CYANIDIN  
L13 789 SEA FILE=HCAPLUS L7 OR PEONIDIN  
L14 911 SEA FILE=HCAPLUS L8 OR PELARGONIDIN  
L15 628 SEA FILE=HCAPLUS L11 (L)COLOR? AND (L12 OR L13 OR L14)  
L16 190 SEA FILE=HCAPLUS L15 AND (VEGETABLE? OR PLANT?)  
L17 142738 SEA FILE=HCAPLUS L9 OR HYDROCHLORIC(W)ACID?  
L18 84309 SEA FILE=HCAPLUS L10 OR CITRIC(W)ACID?  
L19 2 SEA FILE=HCAPLUS L16 AND (EXTN OR EXTRACT?)(L)(L17 OR L18)

=> d ibib abs hitrn l19 1-2

L19 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 2001:798344 HCAPLUS  
DOCUMENT NUMBER: 135:343647  
TITLE: Anthocyanin dye from **plant** sources and  
method for its preparation  
INVENTOR(S): Smirnov, Vitaly Alekseevich; Sidorov, Viktor

Searched by M. Smith

PATENT ASSIGNEE(S): Viktorovich; Smirnova, Valentina Vladimirovna  
 SOURCE: Moldova  
 PCT Int. Appl., 26 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Russian  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001081478	A1	20011101	WO 2001-RU121	20010326
W: AU, BG, BR, CA, CN, DE, ES, HU, IL, IN, MX, NZ, SI, TR, UA, US, YU RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
RU 2158743	C1	20001110	RU 2000-110391	20000426
RU 2177015	C1	20011220	RU 2001-101588	20010118
EP 1191071	A1	20020327	EP 2001-920027	20010326
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI				
BR 2001006090	A	20020402	BR 2001-6090	20010326
PRIORITY APPLN. INFO.:			RU 2000-110391	A 20000426
			RU 2001-101588	A 20010118
			WO 2001-RU121	W 20010326

AB The natural **coloring** agent for food (e.g., ice cream) comprises **cyanidin** glycosides 0.1-8.6, **peonidin** glycosides 0.08-6.45, **pelargonidin** glycosides 0.05-4.3, and org. matter and mineral salts to 100 wt.% and has  $\lambda_{max}$  in the range 505-515 nm. The method of prepn. consists in the following steps: a predried **anthocyanin**-contg. corn leaves and stubble mixt. is ground, steeped in an ext. soln. and extd. with a mixt. of aq. HCl and **citric acid** under ultrasonic irradiation. The **coloring** agent is then filtered and concd. in vacuum. The **extn.** can be carried out in three steps.

IT 77-92-9, **Citric acid**, uses 7647-01-0  
 , **Hydrochloric acid**, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (in prepn. of anthocyanin dye compn. by **extn.** of  
 plant matter)

IT 134-01-0D, **Peonidin**, glycoside derivs. 134-04-3D  
 , **Pelargonidin**, glycoside derivs. 528-58-5D,  
**Cyanidin**, glycoside derivs.  
 RL: FFD (Food or feed use); MOA (Modifier or additive use); PEP (Physical,  
 engineering or chemical process); BIOL (Biological study); PROC (Process);  
 USES (Uses)  
 (prepn. of anthocyanin dye compn. contg.)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1990:117614 HCAPLUS

DOCUMENT NUMBER: 112:117614

TITLE: Manufacture of a food colouring agent from  
**plant** raw material, and an alcohol-free tonic  
 drink containing it

INVENTOR(S): Karimdzhannov, A.; Rakhimkhanov, Z. B.; Sadykov, A. S.;  
 Ismailov, A. I.; Mukhamedova, F. Kh.; Khezhimatov, K.;  
 Martynova, S. A.; Rasulova, A.; Zykova, A. I.; et al.

PATENT ASSIGNEE(S): Institute of Bioorganic Chemistry, Academy of

SOURCE: Sciences, Uzbek S.S.R., USSR  
PCT Int. Appl., 27 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Russian  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8906671	A1	19890727	WO 1988-SU9	19880112
W: FI, JP				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
EP 354960	A1	19900221	EP 1988-903465	19880112
R: DE, FR, GB, IT				
JP 04505164	T2	19920910	JP 1988-503124	19880112
CN 1043326	A	19900627	CN 1988-108311	19881205
PRIORITY APPLN. INFO.:			WO 1988-SU9	19880112

AB A food **coloring** agent made of a **vegetable** raw material is an ext. sepd. from an **anthocyanin**-contg. raw material, consisting of (in percent by wt.): **cyanidin** glycosides 0.2-6.4, **peonidin** glycosides 0.1-5.3, **delphinidin** glycosides 0.1-4.0, **malvidin** glycosides 0.1-3.6 and/or **petunidin** glycosides 0.05-1.5, **flavonol** 1.0-6.0, **tannin** 1.0-14.0, **org. acids** 28.0-43.0, with mineral salts, **microelements** and **polysaccharides** making up the balance. **Anthocyanin** glycoside-contg. **plants** are crushed and the glycosides extd. with an EtOH-H<sub>2</sub>O mixt. (pH <3.5). Flowers are extd. using the same **extn.** medium followed by a second **extn.** with acidified water (pH <3.5) and the pooled exts. are concd. and mixed with the **plant anthocyanin** ext. at a ratio of 1:4-5 and the glycosides sepd. by the addn. of **tannin**, or by concn. of the ext. in the pressence of **tannin**. An alc.-free tonic drink consists of the following components in kg per 100 decalitres of the drink: fruit juice 100.0-106.0, sugar 67.0-71.0, **citric acid** 1.28-1.40, claimed food **coloring** agent 1.54-1.80, **vanillin** 0.0017-0.0022, Et alc. 0.04-0.06, carbon dioxide 20.0, water the balance.

IT 134-01-0D, **Peonidin**, glycosides 528-58-5D, **Cyanidine**, glycosides  
RL: BIOL (Biological study)  
(vegetable exts. contg., as food colorant)

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INVENTOR(S): Smirnov, Vitaly Alekseevich; Sidorov, Viktor

PATENT ASSIGNEE(S): Viktorovich; Smirnova, Valentina Vladimirovna  
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